

REMARKS/ARGUMENTS

Claims 1-14 and 16-26 are pending in the present application.

This Amendment is in response to the Office Action mailed February 3, 2004. In the Office Action, claims 1-26 were rejected under 35 U.S.C. §112; and claims 1-14 and 16-26 were rejected under 35 U.S.C. §103(a). Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Rejection Under 35 U.S.C. § 112

1. In the Office Action, claims 1-26 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The Office Action states that the term “dynamically” in claims 1, 13, 20 and 21 is a relative term which renders the claims indefinite and is also unclear (Office Action, page 2, paragraph 5a). Applicant respectfully disagrees.

Claims should be interpreted consistently with the specification, which provides content for the proper construction of the claims because it explains the nature of the patentee's invention. “[T]he amount of detail required to be included in claims depends on the particular invention and prior art, and is not to be viewed in the abstract ...,” but in conjunction with the specifications of the patent. Shatterproof Glass Corp. v. Libbey Owens Food Co., 758 F.2d 613 at 624, 225 USPQ 634, 641 (Fed. Cir.), *cert. dismissed*, 474 U.S. 976 (1985). Accordingly, “that some claim language may not be precise ... does not automatically render a claim invalid. When a word of degree is used the district court must determine whether the patent's specification provides some standard for measuring that degree,” such that a person of ordinary skill in the art would understand what is claimed. Seattle Box Co. v. Industrial Crating & Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 573-74 (Fed. Cir. 1984), *cert. denied*, 469 U.S.851(1984).

The term “dynamically” when used in conjunction with the act “create” and “remove” is well understood by one skilled in the art. Furthermore, the specification provides ample support for interpretation of the word “dynamically”. See, for example, page 8, lines 15-21 (“the differentiated services ... are not provisioned until they are needed and authorized”), page 9, lines 13-18 (“access filters are dynamically established and removed...to control access to the

differentiated services...The filters are installed on an as-needed, as-authorized basis...”), page 12, lines 20-22; page 14, lines 2-10 (“...controller creates and removes specific filters...in response to control messages from a remote bandwidth broker...”), page 15, lines 20-22 (“...minimizes the resources dedicated to support filters and classifiers profiles by allocating resource to only those filters/classifier profiles currently in use”), page 16, lines 10-13, lines 16-19 (“...controller dynamically controls the provision of filters and classifier profiles..., thereby reducing the resources dedicated to support differentiated services.”); page 17, lines 13-15; lines 18-22 (“...whether any of the installed filters...have expired”); page 18, line 1 (“If the filter has not expired,..., it continues to monitor...”); page 19, lines 5-12; 16-21; page 20, lines 5-8 (“controller may install or remove filter(s) or classifier profiles based on time of day, received, network traffic,...”); page 21, lines 13-16; lines 21-22; page 22, lines 1-2.

Therefore, Applicant respectfully requests the rejection under 35 U.S.C. §112 be withdrawn.

Rejection Under 35 U.S.C. § 103

In the Office Action, claims 1-14 and 16-26 are rejected under 35 U.S.C. §103(a).

Applicant respectfully traverses the rejections and contend that the Examiner has not met the burden of establishing a *prima facie* case of obviousness for each rejection.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP §2143, p. 2100-124 (8th ed., rev. 1, Feb. 2003). As analyzed below, none of the rejections meets any of the three basic criteria.

1. In the Office Action, claims 1-4, 7-14, 17, 18, 20, 21, 24, 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,341,130 issued to Lakshman et al. (“Lakshman”) in view of Barzilai et al. (“Barzilai”) “Design and Implementation of an RSVP-Based Quality of Service Architecture for an Integrated Services Internet”, 1998.

Lakshman discloses a packet classification method and apparatus employing two fields. In addition to packet forwarding function, a router may perform a packet filtering function

(Lakshman, col. 1, lines 65-67). To perform packet filtering, the router may be provided with a table or list of filter rules specifying routing denial or action to be taken according to specified sources or source address (Lakshman, col. 2, lines 3-5). The general packet classification problem of a packet filter may be modeled as a point-location in a multi-dimensional space (Lakshman, col. 2, lines 49-51). A 2-dimensional filter rule operate on two fields S and D which correspond to the source address value and a group identifier (Lakshman, col. 4, lines 65-67; col. 5, lines 1-3).

Barzilai discloses a design and implementation of an RSVP-based quality of service architecture for an integrated services internet, as discussed in the previous response.

Neither Lakshman nor Barzilai discloses, suggests, or renders obvious a controller to dynamically create and remove the filters controlling access to the different service levels.

The Office Action states that Lakshman discloses filters including at least one filter being triggered to denote when a received packet satisfies filter criteria corresponding to an admission policy (filter rules) related to differentiated service levels (Office Action, page 3, paragraph 8). But the filter rules are not the admission policy. Filter rules may be based on source addresses, destination addresses, source ports, destination ports, and/or any combination of these fields (Lakshman, col. 2, lines 20-25). The filter merely performs a point-location in a multi-dimensional space (Lakshman, col. 2, lines 49-51). Point-location is not related to differentiated service levels. Furthermore, they are not dynamically created or removed based on an admission profile of the admission policy.

As discussed in the previous response, Barzilai merely discloses a session handle, not a classifier to clarify and mark one of the differentiated service levels. The filters are set up at the routers and at the hosts to classify packets belonging to an RSVP flow, and to treat them in accordance with the reservation made for the flow (Barzilai, page 399, left column, lines 12-15). The filter therefore is a statically compiled packet filter for traffic classification during reservation set up signaling (Barzilai, page 411, right column, lines 13-15).

The Office Action states that Barzilai teaches a general classifier for real-time packet forwarding and packet filters that provide general and flexible classification of incoming packets to application end points and dynamic code generation techniques that are applied to realize very efficient packet filters (Office Action, page 4, paragraph 9). However, these filters do not have

criteria corresponding to an admission policy related to differentiated service levels. They are merely used to classify packets based on the RSVP flow which is uniquely identified by the 5-tuple (protocol, src address, src port, dst address, dst port) (Barzilai, page 399, left column, lines 10-12). Furthermore, none of these filters are created or removed dynamically based on an admission profile of the admission policy.

In contrast, Applicant's claimed invention recites, *inter alia*, an apparatus to "dynamically create and remove filters controlling access to the different service levels based, at least in part, on an admissions profile," (Claim 1) a "method for controlling provision of differentiated services . . . comprising . . . (b) dynamically creating an ingress profiler which polices admission to a particular service level" (Claim 13), and an "apparatus adapted to facilitate communications between a client device and a remote device, comprising: filter means for controlling access to differentiated service levels; . . . and control means for dynamically creating and removing a portion of the filter means based at least in part on an admission profile." (Claim 21).

2. The Office Action further states that claims 5, 6, 16, 19, 22, and 23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lakshman in view of Barzilai as applied to claims 1, 13, 14, and 21, and further in view of U.S. Patent No. 6,651,101 issued to Gai et al. ("Gai").

Gai discloses a method and apparatus for identifying network data traffic flows and for applying quality of service treatments to the flows. A local policy enforcer monitors the traffic originating from the network entity and, by examining the IP source and destination addresses, applies the prescribed policy or service treatments to the given traffic flow (Gai, col. 4, lines 61-65). The local policy enforcer may include an admission control module that determines the percentage of time that its CPU as remained idle recently, its available memory for storing policies associated with components, and the availability of its traffic management resources (Gai, col. 12, lines 41-48).

The Office Action states that Gai discloses the admission profile is stored in a communicatively coupled remote device (Office Action, page 8, paragraph 29). However, Gai merely discloses a local policy enforcer to determine the percentage of time that its processor has remained idle and its availability for storing policies (Gai, col. 12, lines 42-47). Since the

processor belongs to a local policy enforcer, its memory cannot be a remote device. Gai, in effect, teaches away the claimed invention by teaching storing policies in a local memory, not a remote device.

In view of the above, there is no suggestion or motivation to combine Lakshman, Barzilai, and Gai.

3. In the Office Action, claims 12 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lakshman and Barzilai as applied to claims 1, 11, 21, 24 and 25 above and further in view of what was well known to the ordinary artisan in the networking art at the time the invention was made. The Office Action states that the Examiner takes Official Notice that a network administrator having the capability to remove filters based on an expiration day or time of day is well known in the networking art (Office Action, page 10, paragraph 37). However, if the Official Notice is taken of a fact, unsupported by documentary evidence, the technical line of reasoning underlying a decision to take such notice must be clear and unmistakable. MPEP 2144.03B, page 2100-132, Rev 2, Feb. 2003. Here, Lakshman or Barzilai does not disclose or suggest removing a filter. The Examiner fails to present a technical line of reasoning to show the official notice that controller dynamically removing a filter based on time of day is clear and unmistakable.

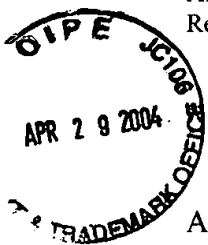
The Office Action further states that “[f]ailure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims” (Office Action, page 12, paragraph 42). However, the Office Action did not provide any legal support for the above statement.

Claims should be interpreted consistently with the specification, which provides content for the proper construction of the claims because it explains the nature of the patentee's invention. “[One] may look to the written description to define a term already in a claim limitation, for a claim must be read in view of the specification of which it is a part”. See Renishaw, 158 F.3d 1250, 48 USPQ2d at 1120 (Fed. Cir. 1998).

The limitation “dynamically” is already in the claim. This term has ample support and interpretation in the specification. Based on this interpretation, none of the cited prior art references discloses (either implicitly or explicitly), suggests, or renders obvious the claimed

invention. In addition, there are many other limitations in the claims that are clearly distinguishable from the cited prior art references. These distinguishing aspects include: (1) packet satisfying filter criteria corresponding to an admission policy related to differentiated service levels, (2) a classifier to classify and mark one of the service levels, and (3) a controller to dynamically create and remove the filters. For example, none of the cited prior art references discloses or suggests removing the filters.

Applicant submits that independent claims 1, 13, 21 and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicant respectfully requests the rejections under 35 U.S.C. §112 and 35 U.S.C. §103(a) be withdrawn.



Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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